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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,938	06/27/2001	Raouf Botros	SDP273PA	6293

7590

09/18/2003

Law Office of Barbara Joan Haushalter  
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Bellefontaine, OH 43311

EXAMINER

SHOSHO, CALLIE E

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 09/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/893,938

Applicant(s)

BOTROS ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 6/19/03.

**Oath/Declaration**

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing or post office address of each inventor. A mailing or post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing or post office address should include the ZIP Code designation. The mailing or post office address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

In response to the above, which was previously set forth in paragraph 1 of the office action mailed 10/8/02, Paper No. 4, applicants state that the executed declaration of record indicates the residence of each inventor which is customarily known as the post office address of each inventor.

However, as found in MPEP 605.03, applicants are required to provide a declaration that includes the post office address of each inventor. When the post office address of each inventor is the same as the residence address, the declaration must still indicate this either by explicitly

disclosing the same address for both the residence address and the post office address or by providing the residence address and indicating "Same" for the post office address.

**Claim Rejections - 35 USC § 102**

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3, 5, 13, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ooms (U.S. 4,476,031).

The rejection is adequately set forth in paragraph 7 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

**Claim Rejections - 35 USC § 103**

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 3, 5, 7, 9, 13-14, 17-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '789 (U.S. 5,730,789) in view of either Gundlach et al. (U.S. 6,258,873) or Moffatt et al. (U.S. 6,323,257).

The rejection is adequately set forth in paragraph 10 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '789 in view of either Gundlach et al. or Moffatt et al. as applied to claims 1, 3, 5, 7, 9, 13-14, 17-18, and 20 above, and further in view of Kashiwazaki et al. (U.S. 6,011,098).

The rejection is adequately set forth in paragraph 12 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

8. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '789 in view of either Gundlach et al. or Moffatt et al. as applied to claims 1, 3, 5, 7, 9, 13-14, 17-18, and 20 above, and further in view of Kashiwazaki et al. (U.S. 6,011,098) and Kitamura et al. (U.S. 6,110,315).

The rejection is adequately set forth in paragraph 13 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '789 in view of either Gundlach et al. or Moffatt et al. as applied to claims 1, 3, 5, 7, 9, 13-14, 17-18, and 20 above, and further in view of Hayes (U.S. 4,150,997).

The rejection is adequately set forth in paragraph 14 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

10. Claims 1, 3, 5, 7, 9-14, 17-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '512 (U.S. 6,280,512) in view of either Gundlach et al. (U.S. 6,258,873) or Moffatt et al. (U.S. 6,323,257).

The rejection is adequately set forth in paragraph 15 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '512 in view of either Gundlach et al. or Moffatt et al. as applied to claims 1-7, 9-18, and 20 above, and further in view of Kashiwazaki et al. (U.S. 6,011,098).

The rejection is adequately set forth in paragraph 16 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Botros '512 in view of either Gundlach et al. or Moffatt et al. as applied to claims 1-7, 9, 13-18, and 20 above, and further in view of Hayes (U.S. 4,150,997).

The rejection is adequately set forth in paragraph 17 of the office action mailed 10/8/02, Paper No. 4, and is incorporated here by reference.

**Response to Arguments**

13. Applicants arguments with respect to Miyazaki et al. (U.S. 5,990,201) have been fully considered but they are moot in view of the discontinuation of this reference against the present claims.

14. Applicants' arguments filed 6/19/03 have been fully considered but, with the exception of arguments relating to Miyazaki et al., they are not persuasive.

Specifically, applicants argue that:

(a) Ooms et al. is not a relevant reference against the present claims.

(b) Neither Botros '789 nor Botros '512 disclose ethoxylated polyethyleneimine in amount as required in present claims.

(c) Moffatt et al. and Gundlach et al. disclose several types of thickeners with no criticality disclosed with respect to the type of thickener utilized.

With respect to argument (a), applicants argue that the ethoxylated polyethyleneimine in Ooms et al. is used to provide softening robustness and viscosity control while the ethoxylated polyethyleneimine in the present invention provides permanence to image by reacting with dye in the ink under controlled pH.

While it is agreed that the ethoxylated polyethyleneimine disclosed by Ooms et al. is used for different purpose than ethoxylated polyethyleneimine presently claimed, it is noted that the present claims only require coating composition containing ethoxylated polyethyleneimine.

Ooms et al. disclose coating composition comprising ethoxylated polyethyleneimine and thus meets the requirements of the present claims. Regardless of the reason Ooms et al. uses the ethoxylated polyethyleneimine, the fact remains the Ooms et al. disclose coating composition comprising ethoxylated polyethyleneimine, which meets the requirement of the present claims.

Applicants also argue that the ammonium sulfate disclosed by Ooms et al. is completely different from the material and purpose of the ammonium sulfate presently claimed.

However, it is noted that only present claims 13 and 14 require that the electrolyte is ammonium sulfate. Further, these claims only require that the electrolyte “comprises ammonium sulfate”. The ditallow dimethyl ammonium methyl sulfate disclosed by Ooms et al. clearly comprises ammonium sulfate and thus meets the requirements of present claims 13 and 14. While the ammonium sulfate of Ooms et al. is used as fabric softener, it is noted that the present claims only require coating composition comprising electrolyte. Regardless of why Ooms et al. uses the ammonium sulfate, the fact remains that Ooms et al. discloses coating composition comprising ammonium sulfate and thus, meets the requirements of the present claims.

Applicants also argue that Ooms et al. disclose coating composition that has pH of 3.5-7 while the composition of the present invention has pH of 8.8-9.1.

It is agreed that the pH buffer of Ooms et al. produces composition with pH 3.5-7. This is why Ooms et al. is not used to reject present claims 10-12 which require specific type of pH buffer as well as specific pH. It is noted that presently claim 1, however, only broadly requires the use of pH modifier, which is disclosed by Ooms et al.



With respect to argument (b), it is agreed that example III of Botros '789 utilizes 1.4% ethoxylated polyethyleneimine and claim 9 of Botros '789 discloses the use of 1-2% ethoxylated polyethyleneimine. This is why Botros '789 is no longer used as a reference against present claim 4. However, it is noted that the amount of ethoxylated polyethyleneimine disclosed by Botros '789 clearly falls within the amount required in present claim 3, namely, 0.5-10%, while the remaining claims do not require any specific amount of ethoxylated polyethyleneimine.

Further, it is agreed that Botros '512 utilizes 0.18-.8% ethoxylated polyethyleneimine. This is why Botros '512 is no longer used as a reference against present claim 4. However, it is noted that the amount of ethoxylated polyethyleneimine disclosed by Botros '512 clearly overlaps the amount required in present claim 3, namely, 0.5-10%, while the remaining claims do not require any specific amount of ethoxylated polyethyleneimine.

With respect to argument (c), it is noted that neither Botros '789 nor Botros '512 disclose use of thickener, which is why each reference is used in combination with either Moffatt et al. or Gundlach et al.

Moffatt et al. disclose the use of thickener such as guar gum to improve print quality and optical density of the ink while Gundlach et al. disclose the use of thickener such as guar gum to produce ink with improved edge acuity, decreased showthrough in paper, and higher optical density as compared to inks not having the thickener.

While it is agreed that Moffatt et al. and Gundlach et al. each disclose several types of thickeners, it is noted that the present claims only broadly require the use of thickening additive

and thus the present claims are open to the use of any type of thickener including those disclosed by Moffatt et al. or Gundlach et al.

**Allowable Subject Matter**

15. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 would be allowable if re-written in independent form as described above given that none of the cited references, namely Ooms et al. (U.S. 4,476,031), Botros (U.S. 5,730,789), or Botros (U.S. 6,280,512) disclose using ethoxylated polyethyleneimine in amount of 5%.

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

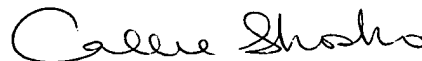
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
9/16/03